

TO THE CHAIRMAN AND MEMBERS OF THE BOGNOR URBAN DISTRICT COUNCIL.

GENTLEMEN,

I beg to lay before you my 24th Annual Report on the health and sanitary condition of the Urban District of Bognor for the year ended 31st December, 1913.

The area of the District is 865 acres and contains about 2037 inhabited houses.

During the last five years the increase in the number of inhabited houses has been as follows :

In	1909	there	were	1797	Inhabited	Houses.
"	1910	"	"	1840	"	"
"	1911	"	"	1885	"	"
"	1912	"	"	1994	"	"
"	1913	"	"	2037	"	"

Seventy-six plans of new buildings and alterations to old buildings were approved by the Council. Eighty-two buildings were erected during the year and 39 are in course of erection.

The population estimated to the 30th June, 1913, is 8583.

The gross number of deaths during the year was 102, viz :—50 males and 52 females. These deaths were distributed over the 12 months as follows :—

	Males.	Females.	Total.
January	6	6	12
February	4	7	11
March	6	6	12
April	4	7	11
May	4	6	10
June	—	1	1
July	4	4	8
August	6	4	10
September	3	2	5
October	7	1	8
November	2	5	7
December	4	3	7
	50	52	102

Included in this number are two deaths which occurred in Institutions in the District.

I have received from the County Medical Officer the names of eleven Bognor residents who died in the Royal West Sussex Hospital or in Gralingwell Asylum or in the Workhouse during the year, and of six Bognor residents whose deaths occurred outside the Urban District of Bognor. These deaths, in accordance with the instructions of the Local Government Board, are not included in the figures used in arriving at the death rate of the District, but they are included in Table III which deals with deaths at the various ages of residents whether occurring in or beyond the District.

The total number of deaths, and the death rates since the increase of the area of the District, which took place on 1st October, 1900, are as follows :—

	Total.	Rate.
1901	66	10·5
1902	80	12·4
1903	76	11·4
1904	82	11·9
1905	71	10·0
1906	66	9·0
1907	75	10·0
1908	69	8·9
1909	103	13·0
1910	78	9·6
1911	96	11·7
1912	106	12·6
1913	102	11·8

The estimated death rate is 11·8 per 1000.

The various ages at which death occurred during the year under report were as follows :—

Under 1 year	14
1 year and under 5 years	3
5 years „ „ 15 „	2
15 „ „ „ 25 „	4
25 „ „ „ 65 „	39
65 „ „ „ 80 „	23
80 years and over	17
	102

The ages of death of those of 80 years and upwards were as follows :—

4	at	80
1	„	82
1	„	83
2	„	84
1	„	86
3	„	87
3	„	89
1	„	90
1	„	92

The chief causes of death were as follows :—

Phthisis	...	...	15	Appendicitis	...	...	1
Tuberculous Meningitis	...	...	1	Nephritis	...	...	3
Other Tuberculous diseases	...	...	1	Cirrhosis	...	...	1
Cancer & other Malignant diseases	...	...	14	Diseases & accidents of parturition	...	...	1
Rheumatic Fever	...	...	1	Congenital Malformation	...	...	2
Meningitis	...	...	3	Accidents	...	...	2
Organic Heart Disease	...	...	11	Suicide	...	...	1
Bronchitis	...	...	9	All other causes	...	...	30
Pneumonia	...	...	6				
							102

One of the deaths from accident was caused by a fall from a ladder ; the other was that of a man found drowned in the sea.

During the year there were, as stated above, 14 deaths of infants under 1 year of age, which gives an infantile mortality rate of 1·6 per 1000 general population, and 93·9 per 1000 births registered.

These were distributed over the 12 months as follows :—

	Males.	Females.	Total.
January	2	1	3
February	—	1	1
March	1	—	1
April	1	—	1
May	1	1	2
June	—	—	—
July	—	1	1
August	—	1	1
September	1	—	1
October	2	—	2
November	—	1	1
December	—	—	—
	8	6	14

There were no deaths from Diarrhoea among Infants.

Under the Infectious Diseases Notification Act, 1889, adopted by your Council in 1891, I have received 17 Notifications, viz:—Scarlet Fever 11, Diphtheria 1, Enteric Fever 2, Erysipelas 3.

The totals notified during the last 10 years were as follows :—

1904	...	35	1909	...	17
1905	...	34	1910	...	46
1906	...	35	1911	...	43
1907	...	38	1912	...	22
1908	...	33	1913	...	17

The above notified cases were spread over the twelve months as follows :—

	Scarlet Fever.	Diphtheria.	Enteric Fever.	Erysipelas.
January	2	—	—	—
February	—	—	—	—
March	1	—	—	—
April	—	—	—	1
May	1	—	—	—
June	1	—	—	—
July	2	—	1	—
August	—	—	—	—
September	—	—	1	—
October	3	1	—	—
November	1	—	—	1
December	—	—	—	1
	11	1	2	3

There was no death from Zymotic Disease.

Ten of the cases of Scarlet Fever were removed to the Isolation Hospital and all recovered.

The accommodation at the Isolation Hospital provides 12 beds for Scarlet Fever patients namely, 6 male and 6 female; and 12 beds for Diphtheria patients namely, 6 male and 6 female; this accommodation is ample under present circumstances.

Disinfection of premises occupied by patients suffering from notifiable diseases was carried out to the satisfaction of the Sanitary Authority in all cases.

The number of births registered in the District was 149, namely, 76 males and 73 females.

This gives a birth rate of 17·3 per 1000 estimated population.

The births were distributed over the 12 months as follows :—

	Males.	Females.	Total.
January	10	7	17
February	9	7	16
March	4	10	14
April	10	4	14
May	7	2	9
June	5	6	11
July	6	5	11
August	3	4	7
September	7	9	16
October	7	5	12
November	3	4	7
December	5	10	15
	76	73	149

The figures for the previous five years were as follows :—

	Males.	Females.	Total.	Rate.
1908	60	61	121	15·7
1909	73	59	132	16·7
1910	58	72	130	16·0
1911	81	71	152	18·5
1912	65	63	128	15·2

The Sea fishing forms the principal industry of the town and no trade is carried on which could have any prejudicial influence on the public health. For years the locality has been a resort for persons seeking rest and restoration to health.

The aspect of Bognor is almost due South; it is sheltered from the East and North-east winds by the south downs. The air is remarkably pure, balmy, and bracing, having the mildness of the Southern and the dryness of the Eastern coast. The surface soil is gravelly and very porous, the roads dry rapidly after rain. Fogs are rare, and in summer few days occur without sea breezes tempering the heat. The prevailing wind is South-west. Snow is rarely seen and when it falls it disappears rapidly. The sands decline gradually from the parade constituting a safe playground for children. At high tide the sea reaches up to the parade, the foreshore getting well washed twice daily.

The water supply of the town is ample in quantity and still maintains its high standard of purity as shewn by the accompanying report. It is drawn from deep wells at the foot of the downs about 7 miles distant where there is a pumping station which fills a covered service reservoir on the side of the hill from which the water falls by gravitation to the Town.

THE LABORATORY,
11, BILLITER SQUARE,
LONDON, E.C.

REPORT ON A SAMPLE OF WATER FROM THE BOGNOR WATER COMPANY, BOGNOR.

From tap in Inspector's Cottage, F. J. Martin, Engineer and Manager of the Bognor Water Company.

COMPOSITION PER 100,000 PARTS :—

Chlorine	2'30
Sulphuric Acid (SO ₃)	1'00
Nitric Acid (N ₂ O ₅)	2'00
Phosphoric Acid	None.
Free Ammonia	0'0011
Albuminoid Ammonia	0'0035
Oxygen absorbed from permanganate at 80°F. in 15 mins.	0'012
ditto in 4 hours	0'024
Total solids dried at 212°F.	32'8
Loss on ignition	3'2
Appearance of solids on heating	No visible change.
Hardness Permanent	47
do. Temporary	18'8
do. Total	23'5
Colour and Appearance	Faintly blue; clear.

BACTERIOSCOPIC EXAMINATION.

B. Coli not detectable in 35 cubic centimeters.

The results of the chemical analysis show that the supply is of very high organic purity. No trace of contamination of any kind is detectable. The water has the character of a perfectly pure unpolluted supply from chalk.

The Bacterioscopic examination shows the absence of any organisms that might be due to surface water.

The quality of this water is in every respect satisfactory.

OTTO HEHNER.

The milk supply is chiefly imported from the neighbouring farms.

DAIRIES, COWSHEDS AND MILK SHOPS ORDER.

Your Veterinary Inspector has done good work during the year under report as will be seen by his own final report.

Certain rules have been drafted as to the precautions to be taken for promoting cleanliness in the milking of cows. These rules have been printed on placards and circulated among cow-keepers and dairy men with a view to the same being posted up in their cowsheds and dairies. Certificates have been granted to such of the cowkeepers and dairymen mentioned in the veterinary inspector's report whose premises were in a sanitary condition and whose cattle were free from tuberculosis and housed under hygienic conditions.

Instructions were given to one dairyman and purveyor of milk calling his attention to the fact that he was carrying on his trade without having first registered in accordance with Article 6 of the Dairies, Cowsheds and Milk Shops Order of 1885.

The Chichester Dairy Company made application to be registered but on my inspection of their premises I found there was no proper dairy for the storing of milk. This being a new building it was required that a proper up-to-date dairy should be built complying with the act before registration could be granted. This is being carried out.

In one case only was any objection raised to the inspection of the cows and cowsheds.

VETERINARY INSPECTOR'S REPORT.

GENTLEMEN,

This being the final report for the year ending 31st December, 1913, it is perhaps advisable to review what has been done ; and to consider a few things that remain to be done.

During this year I have examined from time to time all the Cows, Cowstalls, and Dairies in this Urban District and in the neighbourhood from which the town's milk supply is derived.

In the first place as regards the cows. During the year the standard of health has been very good and with the co-operation of the farmers and dairymen I have had little trouble in obtaining the removal from the herd of any suspicious looking animal or any cow giving milk not up to the standard.

As regards Cowstalls and sheds. In this section I am glad to report very considerable progress during the year. Certain cowsheds at Felpham have been given up and the ground sold as a building site. Certain sheds at Aldwick have been condemned and no cattle are housed there now ; all the milch cows having been removed. The Cowstalls at North Bersted have been put into a sanitary condition. The Cowsheds in Sheepwash Lane had been condemned ; the owner, not being willing to put them in such a condition as to comply with the Dairies and Cowsheds order, has wisely abandoned the keeping of cows and has sold his herd. Quite a model cowshed and stalls have been built at Babsham Farm. A "Cooling House" has recently been built at the Church Farm Dairy at Felpham. At Lidsey Farm a very up-to-date set of buildings has been built where a large number of cows are kept.

I am pleased to report as regards the Town Dairies. These are kept, to the credit of the owners, in good and sanitary condition ; and only once during the year have I had to draw the attention of one party to the necessity of a little more frequent use of the whitewash brush in the washing shed.

The Slaughter houses have also been improved. The slaughter house in Scott Street has undergone complete renovation inside and is satisfactory in every way. The slaughter house at the end of Ockley Road has had a new flooring put in and other matters reported on during the year have been attended to.

Gentlemen,

I remain your obedient servant,

JAS. T. ANGWIN, M.R.C.V.S.

There are 4 slaughterhouses in use in the District. These have been periodically inspected during the year. They have been inspected also at times of slaughtering.

Under the Sale of Food and Drugs Act, 11 samples were taken during the year for the purpose of analysis by the Public Analyst.

Samples.	Number Analysed.	Genuine.	Adulterated.
New Milk	7	7	0
Cream	4	4	0

No carcasses, or parts of carcasses, have been condemned for tuberculosis or as being unfit for human food.

No fish, fruit, or other foods have been condemned during the year.

The sanitary condition of the premises where foods are prepared, stored, or exposed for sale is satisfactory.

There are no underground bakehouses in the District.

The new scheme of sewerage and outfall which was under consideration at the date of my last report has now been agreed upon. The sanction of the Local Government Board has been obtained; and contracts are being entered into for the execution of the work which is to be completed by the end of the year 1914.

The amount of the Loan that is sanctioned by the Local Government Board is £12,137; but it is hoped that the contract will be carried out for somewhat less than this amount. The Scheme involves the taking in of the sewerage of the adjoining parish of Felpham in the West-hampnett Rural District. This will remove a menace to the public health arising from an undrained district being in such close proximity.

During the season the house refuse is collected (in covered carts provided by the Council) twice a week; during the rest of the year it is collected once a week. Sanitary dustbins with covers have been provided where necessary.

The Destructor, which has been working since October, 1911, still continues to be working most satisfactorily. During the year under report, 3108 loads of refuse have been destroyed. 669 loads of clinkers and 63 loads of ashes have been used in road construction. The sale of bottles, rags, bones, and old iron realised £29 14s. 2d. during the year. It is satisfactory to note that there have been no complaints whatever concerning the smoke from the chimney.

During the year 48 nuisances were reported to the Sanitary Authority. In 21 of these cases notices were served for the abatement which have all been complied with. The other 27 cases were dealt with without it being necessary to serve notices. It was not necessary to serve statutory notices in any of the cases.

One case of overcrowding was reported which was dealt with.

The Public Elementary Schools are supplied with town water and are in a sanitary condition. During the vacations they are thoroughly cleansed and disinfected.

A special School Medical Officer is appointed by the County Council for the inspection of the children in the Public Elementary Schools.

Under the Public Health (Tuberculosis) Regulations, 1912, which requires notification of all cases of Tuberculosis, and which came into force 1st February, 1913, I have received 16 certificates which were classified as follows:—

	Males.	Females.
Pulmonary	4	5
Non pulmonary	1	6

A dispensary is to be provided at Chichester for the treatment, when necessary, of these cases.

There is no hospital accommodation for these cases in the Urban District of Bognor.

The Factories on the register at the end of the year, under the supervision of the Council are 11 in number and are classified as follows:—

Steam Laundry	1	Printers	2
Mineral Water Works	1	Shoemaker	1
Stone Mason	1	Motor Works	3
Forage Contractors	2		

The Workshops on the Register at the end of the year were 75 in number and are classified as follows :—

Bakehouses	9	Dressmakers	12
Tailors	6	Laundries	4
Carpenters	11	Shoemakers	7
Plumbers	4	Coach Builders	2
Horse Farriers, &c.	7	Watchmakers	4
Undertakers & Cabinet Makers	2	Cycle Manufacturers	4
Harness Makers	2	Brick Makers	1

All the above Factories and Workshops have been inspected during the year.

Systematic inspections of the District have been made from time to time, or as occasion required, by myself or the Sanitary Inspector. Regular monthly reports of the work have been laid before the Sanitary Committee. Besides this general supervision, I have paid 86 special visits in cases where required.

The scavenging and watering of the streets under the control of the Council have been thoroughly and systematically carried out.

Under the provisions of the Housing and Town Planning Act, 1909, and the Housing (Inspection of Districts) regulations, 1910, 63 inspections have been made. Closing orders were made in 12 cases, and notices were served, under Section 15 in respect of 41 houses. In 12 of these 41 houses the alterations necessary to make the houses habitable have been carried out. In 12 the work has been substantially commenced; while in the remaining 17 cases nothing so far has been done.

The general character of defects found to exist were:—Bad drainage; dampness in the buildings caused by leaky roofs and outside walls; insanitary and unpaved yards; want of sufficient light in rooms; and general dilapidation of dwellings.

The progress of the Council's Housing Scheme during the year has been most satisfactory. The 13 working class dwellings mentioned in my last report have been erected and all are occupied. Of the other 48 also referred to, 12 are erected and occupied; and 16 are in course of erection and will be completed for occupation by the end of February, 1914. Applications for the houses in course of erection exceed the number to be let; and it is quite evident that the Council will have to consider the completion of their Scheme, as there is still a dearth of cottages obtainable at a rent within the means of the working classes.

Eight new Private Roads have been under construction during the year. Of these, Richmond Avenue West, is finished and ready to be taken over by the Council. The others, namely:—Shelley Road; 3 Roads leading from Longford Road to Linden Road; 2 Roads in Normanton Avenue; and Nyewood Avenue will be taken over as soon as completed. In all the roads surface water drains and sewers have been laid.

To remedy the complaints from residents in the vicinity of York Road, of damage caused by storm water flooding their properties in times of heavy gales, the Town Surveyor has designed and constructed a system of storm water drains, and has made a number of large culverts through the Parade, to collect this storm water and conduct it back to the sea. He further contemplates the construction of a bull nose apron to the wall at the place where the greatest flooding occurs, namely in front of the Cotswold Estate. A Loan has been sanctioned for these works by the Local Government Board. A further Loan has been sanctioned for widening the Promenade in front of Colebrook Terrace where the Urban Council have enclosed two pieces of grass land and have raised the ground to the level of the promenade. This widened portion will give increased accommodation for visitors; and will help to prevent the flooding of the road by the sea water.

Some time ago, I brought to the notice of the Council, the fact that I had frequently received applications from the Medical Officers of Health for other Districts, and from other persons especially prospective Visitors or Residents, for information respecting the Climatic conditions prevailing in the locality.

In order adequately to furnish the required information, it is most desirable that the Council should assist the Bognor Meteorological Society to maintain their Instruments in good order, and to provide new ones when required.

In reply to a letter on the above subject, the Secretary to the Local Government Board stated that "The Board is of opinion that it is competent to an Urban District Council to incur "reasonable expense shown to be necessary for the purpose of obtaining information as to Climatical "influences likely to affect the Public Health, and thus to enable the Medical Officer of Health to "discharge with greater efficiency duties pertaining to his Office."

At the present time, the Bognor Meteorological Society kindly permits the Council to make use of their Instruments and records for the purpose of furnishing Reports.

I trust, therefore, that the Council will lose no time in conferring with the Society with a view to purchasing any new, or additional, Instruments required, and assisting in any other way, to complete their Observation Station.

I would draw your attention to the fact that the work of the Public Health Department steadily increases, as year by year Parliament throws greater and more extended responsibilities upon Local Authorities.

I enclose Tables I, II, III and IV specially required by the Local Government Board, and I take this opportunity of thanking the Members of the Sanitary Committee and the Inspector of Nuisances for the courtesy and help they have extended to me during the year.

I beg to remain,

Your obedient Servant,

W. CONWAY-COOKE,

Associate of King's College, London,
Fell. Royal Institute of Public Health,
Medical Officer of Health.

Bognor,

6th March, 1914.

TABLE I.
Vital Statistics of Whole District during 1913 and previous Years.

Name of District: BOGNOR URBAN DISTRICT.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number.	Nett.		Number.	Rate.	of Non-residents registered in the District.	of Residents not registered in the District.	Under 1 Year of Age.		At all ages.	
			Number.	Rate					Number.	Rate per 1,000 Nett Births	Number	Rate.
1	2	3	4	5	6	7	8	9	10	11	12	13
1908.	7685	121		15.7	69	8.9					71	9.2
1909.	7892	132		16.7	103	13.0					105	13.3
1910.	8100	130		16.0	78	9.6					82	10.1
1911.	8191	152	153	18.6	96	11.7	10	19	15	98.0	105	12.8
1912.	8387	128	133	15.8	106	12.6	9	13	16	120.0	110	13.0
1913.	8583	149	151	17.5	102	11.8	7	17	14	92.7	112	13.0

Total population at all ages 8142

Area of District in acres } 865
(land and inland water)

Number of inhabited houses 1885

Average number of persons per house 4.3

} At Census of 1911.

TABLE II.
Cases of Infectious Disease notified during the year 1913.

Name of District: BOGNOR URBAN DISTRICT.

NOTIFIABLE DISEASE.	AT ALL AGES.		TOTAL CASES REMOVED TO HOSPITAL.	
Small-pox ...	...	...	...	...
Cholera.—Plague ...	...	...	...	...
Diphtheria (including Membranous croup ...	1	...	...	...
Erysipelas ...	3	...	...	...
Scarlet Fever ...	11	...	...	10
Typhus Fever ...	...	...	...	...
Enteric Fever ...	2	...	...	...
Relapsing Fever ...	...	...	...	...
Continued Fever ...	...	...	...	...
Puerperal Fever ...	...	...	...	...
Cerebro-spinal Meningitis ...	...	...	...	...
Poliomyelitis ...	...	...	...	...
Pulmonary Tuberculosis ...	...	...	...	...
Other forms of Tuberculosis ...	...	...	...	...
Totals ...	17	...	...	10

Isolation Hospital—Bognor Isolation Hospital, situated in Sheepwash Lane, within the District.
Provided by the Urban District Council.

TABLE III.
Causes of, and Ages at Death during the Year 1913.

Name of District: BOGNOR URBAN DISTRICT.

CAUSES OF DEATH.			Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.										Total deaths whether of 'Residents' or 'non-Residents' in Institutions in the District
			All Ages.	Under 1 year.	1 and under 2 years.	2 and under 5 years.	5 and under 15 years.	15 and under 25 years.	25 and under 45 years.	45 and under 65 years.	65 and upwards.		
1			2	3	4	5	6	7	8	9	10	11	
All Causes	Certified	...	112	14	2	1	2	4	11	34	44	2	
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	
Enteric Fever	...	...	1	...	...	...	...	...	...	1	...	...	
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	
Measles	...	...	...	...	...	...	...	...	...	...	...	...	
Scarlet fever	...	...	...	...	...	...	...	...	...	...	...	...	
Whooping-cough	...	...	...	...	...	...	...	...	...	...	...	...	
Diphtheria and Croup	...	...	...	...	...	...	...	...	...	...	...	...	
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	
Phthisis, (Pulmonary Tuberculosis)	...	...	15	1	1	...	1	3	6	2	1	...	
Tuberculous Meningitis	...	...	1	1	...	...	...	...	...	...	...	...	
Other tuberculous diseases	...	...	1	1	...	...	...	...	...	...	...	...	
Cancer, malignant disease	...	...	16	...	...	...	...	...	...	9	7	...	
Rheumatic Fever	...	...	1	...	...	1	...	...	...	...	...	...	
Meningitis	...	...	2	1	...	...	1	...	...	...	...	...	
Organic Heart Disease	...	...	12	...	...	...	...	...	1	6	5	...	
Bronchitis	...	...	9	1	...	...	...	...	...	3	5	1	
Pneumonia (all forms)	...	...	8	...	1	...	...	...	...	2	5	1	
Other diseases of Respiratory organs	...	...	...	...	...	...	...	...	...	...	...	...	
Diarrhoea and Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	
Appendicitis and Typhlitis	...	...	...	...	...	...	...	...	...	...	...	...	
Cirrhosis of Liver	...	...	1	...	...	...	...	...	...	1	...	...	
Alcoholism	...	...	...	...	...	...	...	...	...	...	...	...	
Nephritis and Bright's Disease	...	...	4	...	...	...	...	...	...	4	...	...	
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	
Other accidents and Diseases of Pregnancy and Parturition	...	...	1	...	...	...	...	1	...	...	...	...	
Congenital Debility & Malformation, including Premature Birth	...	...	2	2	...	...	...	...	...	...	...	...	
Violent Deaths, excluding Suicide	...	...	2	...	...	...	...	...	...	1	1	...	
Suicide	...	...	1	...	...	...	...	...	1	...	...	...	
Other Defined Diseases	...	...	35	7	...	...	...	...	3	5	20	...	
Diseases ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	
Totals	...	...	112	14	2	1	2	4	11	34	44	2	

1913. Nett Deaths from stated causes at various Ages under 1 Year of Age.

Nett Births in the year	legitimate	...	143.	Nett Deaths in the year of	legitimate infants	...	11.
	illegitimate	...	8.		illegitimate infants	...	3.

Annual Report of the Medical Officer of Health for the year 1913 for the URBAN DISTRICT of BOGNOR, on the administration of the Factory and Workshop Act, 1901, in connection with

FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises. 1	Number of		
	Inspections. 2	Written Notices. 3	Prosecutions. 4
Factories	11	..	..
(Including Factory Laundries).			
Workshops	87	4	..
(Including Workshop Laundries).			
Workplaces	..	..	..
(Other than Outworkers' premises)			
Total	98	4	..

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. 1	Number of Defects.			Number of Prosecutions 5
	Found. 2	Remedied. 3	Referred to H.M. Inspector. 4	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	..	..	..	..
Want of ventilation	..	..	..	..
Overcrowding	..	..	..	..
Want of drainage of floors	..	..	..	..
Other nuisances	..	..	..	..
Sanitary accommodation { insufficient	..	..	..	..
{ unsuitable or defective	..	..	..	..
{ not separate for sexes	..	..	..	..
<i>Offences under the Factory and Workshop Acts :—</i>				
Illegal occupation of underground bakehouse (s 101)	..	..	..	..
Breach of special sanitary requirements for bakehouses (ss. 97 to 100).	2	2	..	..
Other offences	2	2	..	..
(Excluding offences relating to outwork).				
Total	4	4		

3.—REGISTERED WORKSHOPS.

Workshops on the Register [s. 131] at the end of the year.

Important classes of Workshops such as workshop bakehouses, may be enumerated here.	Bakers	9	Harness Makers	2
	Tailors	6	Dressmakers	12
	Carpenters	11	Laundries	4
	Plumbers	4	Shoemakers	7
	Horse Farriers, &c.	7	Coach Builders	2
	Undertakers & Cabinet Makers	2	Watch Makers	4
			Cycle Makers	4
			Brickmakers	1

Total number of workshops on Register

- - 75

March 6th, 1914.

W. CONWAY-COOKE,
Medical Officer of Health.

BOGNOR CLIMATOLOGICAL REPORT for the Year 1913.

Before commenting on the Climatological data shown in the tables given at the end of this, a concise review of the Meteorological conditions which formed the prevailing features of each month of the year will not be out of place.

JANUARY. Although the atmospheric pressure during the first week was fairly high and the days exhibited some hours of bright sunshine, rain fell during the nights. The rest of the month was under the influence of a succession of cyclonic systems, the centres of which passed from the Atlantic eastward and far to the north of the British Isles, producing stormy weather with a good deal of rain—Temperature rather above the normal—Hoar frost was noted only three times, viz: on the 2nd, 13th and 22nd. Rain-bows were seen on the 6th, 15th and 20th. Some lightning on the night of the 19th and thunder heard on the 20th.

FEBRUARY. Began with rain and continued dull and unsettled till the 11th with the exception of the 8th which was almost cloudless, but rain fell during the night. The air pressure remained high all through the middle fortnight, the 17th was marked by a slight fall of rain with snow in the evening, and from this date fine weather lasted to the end of the month.

MARCH. Briefly, the character of this month was rough and wet. Although only 5 days were devoid of bright sunshine and there were 8 days without rain, the former fell short of the average and the latter was in excess, as will be seen by reference to the Tables III and IV. The wind increased in force about the middle of the month and continued more or less strong to the end. Gales occurred on the 16th, 18th and 22nd and on the latter date strong wind was preceded by a thunder storm. This gale caused considerable damage to some places on the South Coast, the Pier at Worthing was wrecked, but Bognor fortunately escaped with very little damage. Hail fell on the nights of the 15th and 20th. Hoar frost was noted on the 18th and a rain-bow appeared on the 21st.

APRIL. This month was of a fairly normal character, the weather giving a mixture of sunshine and shower, only the former was rather deficient, and the latter somewhat abundant. Hoar frost was noted on the 13th when the minimum thermometer in the screen 4-ft. above the grass registered 30 degrees,—this was the date also of the highest air pressure. For other details see the tables.

MAY. The weather during this month was variable all over the United Kingdom, and Bognor did not escape the general tendency. After the first two days the weather became unsettled and rainy, with low barometer readings and variable winds; these conditions continued to the 12th, following this date the weather turned fine and dry, only a few drops of rain being noted until the 29th when a thunder storm occurred which produced a fall of rain of 0.52 of an inch, and the weather again became unsettled to the end of the month.

JUNE. On the whole a fine month; dry and sunny, not a single day passing without some bright sunshine, the percentage of the possible reaching 65 to 90 on some days although the total amount was rather lower than the average of the previous 15 years, the mornings being rather dull, but this was compensated for by the rainfall also being considerably under the average. On only 3 days was the barometric pressure below 30 inches at 9 a.m.

JULY in brief was dull, dry and rather cool. The atmospheric pressure at 9 a.m. which normally is nearly equal to the mean of the day, was above the average, and the relative humidity of the air was also in excess, the quantity of aqueous vapour per cubic foot of air being large; but the quantity of rain which fell was less than the average for July. On the 15th, St. Swithun's day, 0.26 of an inch of rain was collected, the following day was without rain; on the 17th, 18th and 19th less than one-tenth of an inch fell, and there was no more to the end of the month. The temperature, min., max. and mean was also below the normal.

AUGUST. The dry spell begun in July continued during the first week in August; in the second week the weather was rather less settled, a little rain falling, with the wind from S. to N.W. From the 14th to 21st the weather again became fair and without rain, but with less bright sunshine than is due to this season. The remainder of the month was variable, three days the 25th, 26th and 28th having a large per centage of sunshine. viz: 91'3, 72, and 86'8 % respectively; and rain falling on the other days with the exception of 25th and 27th. The 30th and 31st had falls of 1'20 and 1'34 inches due to thunder storms occurring on the 29th and 30th.

SEPTEMBER. A pleasant month on the whole, for although the weather for the first week was dull, with a good quantity of rain, the temperature was equable and genial, the maximum never quite reaching 70 degrees while the minimum did not descend below 45. Two short and distant thunder storms were noted, on the 13th and 15th but the rainfall was very slight, with wind from S.E. to S.W. From the 13th to the 19th the weather was influenced by cyclonic systems which moved slowly over the country and kept the air pressure below the normal; but the wind was at no period strong, and on two mornings, the 19th and 22nd absolute calm was registered. Perhaps the most remarkable feature of the month was the rainfall which was distributed over 11 days: the month opened with a fall of 0'39 of an inch, followed by '01 on the 2nd. On the 4th, 1 inch fell, succeeded by a fall of $\frac{1}{2}$ an inch on the 5th. 0'40 was collected on the 19th and 0'23 on the 22nd after which date the weather remained fine and without rain though the air was very damp, the relative humidity being about 86 per cent. of saturation. The bright sunshine was rather deficient in amount although there were only 3 days that were absolutely devoid of even a gleam.

OCTOBER. The first eleven days were under the influence of cyclonic systems of air pressure producing a disturbed electrical condition resulting in thunder storms on the 7th and 8th accompanied by a good deal of rain; after this the air pressure increased and fairer weather followed till the 19th when the mercury went down again below 30 inches, and the weather continued unsettled for the rest of the month. The most noticeable feature was the temperature which was abnormally high for the time of year for only once, the 24th was the minimum below 40 degrees when it fell to 39, and this was also the date of the lowest max: 53'9 degrees, the highest minimum was recorded on the 28th when 57'5 was reached.

NOVEMBER. Up to the 13th the weather was very unsettled and the Barometric pressure was at its lowest on that date; it only once rose above 30 ins. during the first 16 days, this was on the 3rd. Heavy rain occurred during most of the nights of this period: some hail fell on the 5th and a thunder storm on the 12th caused a fall of 0'95 of an inch of rain. A remarkable circumstance is that during nearly the whole of this fortnight the sunshine was fairly plentiful the average daily being about 38 per cent. of the possible amount, and ranging from 84 down to 11 per cent. From the 15th the weather became less rainy though the air continued to be very damp: there was also less bright sunshine, but the pressure of the air increased.

DECEMBER. This may be regarded as having been a fine month, the atmospheric pressure was high taking it altogether, with light winds mainly W., N.E. and S.W. The relative humidity was rather high but the quantity of rain which was collected was not great and some brilliant days were experienced. Hoar frost was noted on eight mornings between the 19th and 31st. A slight shower of soft hail occurred on the 4th and a little sleet on the 29th. The 25th was mistily bright with hoar frost in the morning and a passing shower about 2.30 p.m. The 26th was overcast at 9 a.m. becoming fairer later, and later still squalls of wind and heavy rain prevailed at night.

In conjunction with the foregoing remarks on the months an examination of the Tables will give a very good idea of the climatic conditions which existed at Bognor during 1913; and it only remains for us to deal a little more in detail with a few items here following.

ACCUMULATED HEAT. The amount above the base of 42 degrees was about 300 day degrees in excess of the average while the amount below the base was 216 day degrees below the average, the result being that vegetation of all kinds was forward and luxuriant.

4-FT. SUBSOIL TEMPERATURE. This fell from 49·1 on January 1st to 45·8 on February 26th and continued at this figure till March 2nd, after this it rose steadily reaching the vital point of 56 degrees on July 2nd when the reading of the thermometer showed 56·1; it had remained at 55·9 from June 24th to July 1st inclusive. From this date it rose to 58·5 on September 9th and 10th and thence forward gradually declined reaching 56 degrees again on October 29th and remained practically at this temperature until November 4th and then falling more rapidly to the end of the year when the reading became 49·2 being only one-tenth of a degree above that on January 1st. On referring to our Report for 1912 it will be seen that the lowest subsoil temperature this year (1913) was about a degree higher than that of last year, and the highest reading 0·4 lower.

RAIN. This was again excessive being over $5\frac{1}{2}$ inches above the average of the previous 15 years, and was only 0·06 of an inch less than the total of 1912.

It will be interesting to compare the following statistics which have been kindly supplied by Mr. Guermonprez of Albert Road, Bognor, Mr. F. J. Neale of Felpham and Mr. H. Neale of Lidsey, with the gaugings obtained in Waterloo Square, Table III.

RAINFALL.										
1913.	Bognor. Albert Road.				Felpham.				Lidsey.	
	Total rain.	Number of rain days.	Greatest fall.	Date.	Total rain.	Number of rain days.	Greatest fall.	Date.	Total Rain.	Number of rain days.
January.	Ins 4·103	21	Ins 0·86	11th	Ins 3·73		Ins. 0·67	11th	Ins. 4·51	
February.	1·238	9	·40	1st	1·18		·44	1st	1·20	
March.	3·155	22	·48	16th	2·64		·42	16th	3·10	
April.	2·154	18	·38	11th	1·95		·38	11th	2·46	
May.	2·063	10	·55	12th	1·96		·63	29th	2·46	
June.	0·871	10	·26	5th	·45		·16	5th	·74	
July.	1·214	12	·31	14th	1·19		·38	14th	1·61	
August.	3·353	10	1·34	31st	3·37		1·44	31st	4·23	
September.	2·932	11	1·00	4th	2·78		1·06	4th	3·13	
October.	5·381	20	1·34	6th	5·21		·95	6th	6·25	
November.	3·661	16	·48	1st	3·30		·89	12th	3·66	
December.	1·958	13	·89	23rd	1·90		·95	23rd	1·95	
Totals.	32·083	172			29·66				35·30	

The average of the rain measured at the four places in the locality is 32·048 inches for the year.

Dry periods of 7 days and over, were, in January 0. February 18th to 24th inclusive. March 0. April 4th to 10th. May 13th to 28th, with a trace of moisture on the 19th only. June 11th to 18th. July 20th to August 7th, 19 days. August 15th to 27th. September 23rd to 29th. October had a dry spell of 5 days only, 15th to 19th. November, 0. December, 6 days, 15th to 20th. Other periods of less duration occurred during the year.

SNOW & HAIL. A slight fall of snow on February 17th in the evening, and a little sleet on December 29th. A shower of soft hail on the morning of January 13th. Hard hail with rain during the nights of March 15th and 20th and April 11th. Some hard hail during a thunder storm on October 21st. A little on the night of November 5th and a squall, with soft hail about 4 o'clock in the afternoon of December 4th.

THUNDER STORMS. There was a little electrical disturbance in the third week of January, lightning being seen on the 19th and distant thunder heard on the 20th. The storm that occurred during the afternoon of March 22nd was more severe and was followed by a strong gale at night. On the 29th of April a short thunder storm occurred from about 7 to 8 p.m. Another on the 29th of May lasted from 11 p.m. to about 1 a.m. on 30th, lightning was observed earlier. Short and distant storms were recorded on the morning of August 29th and evening of the 30th. September had two short storms, one during the night of the 13th and the other on the night of the 15th. There were 3 thunder storms recorded during October, on the night of the 7th, the afternoon of the 8th, and night of the 21st. November had one on the afternoon of the 12th and this was the last for the year.

The following extract is from the Report just published by the Meteorological Office for the year 1913 and shows the measurements of rainfall and sunshine obtained at 18 of the Coast towns. The totals of the amounts of bright sunshine are deduced from the Daily means and are given in the nearest whole hours.

TOWN.			RAINFALL		SUNSHINE.
			Ins.		Hrs.
Felixstowe	...	...	22'2	...	1691
Margate	...	...	20'3	...	1391
Ramsgate	...	...		...	1570
Broadstairs	...	...		...	1622
Folkestone	...	...	31'3	...	1566
Hastings	...	...	30'7	...	1599
Bexhill	...	...	27'7	...	1600
Eastbourne	...	...	31'9	...	1610
Brighton	...	...	32'1	...	1584
Worthing	...	...	35'2	...	1600
Bognor	...	...	31'2	...	1621
Selsey Bill	...	...	32'6	...	1580
Ventnor	...	...	21'7	...	1588
Bournemouth	...	...	33'2	...	1577
Weymouth	...	...	26'1	...	1504
Torquay	...	...	33'2	...	1526
Plymouth	...	...	36'5	...	1467
Falmouth	...	...	45'3	...	1559

H. C. L. MORRIS, M.D., F.R. MET. SOC.

A. G. THOMPSON, C.E., F.R. MET. SOC.

TABLE I.

Air Pressure at 9 a.m.							Wind.										
1913.	Barometer reduced to 32° and Mean-Sea level + gravity at Mt. 450	Difference from Average of 15 years 1898-1912.	Highest Reading.	Date.	Lowest Reading.	Date.	Number of times observed to be blowing from										CALM.
							N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.			
January.	29.822	— 0.280	30.315	26th	29.213	20th	1	3	2	4	5	8	2	5	1		
February.	30.186	+ .256	30.684	12th	29.728	1st	1	7	3	1	4	6	3	2	1		
March.	29.905	+ .026	30.567	9th	28.990	19th	1	3	1	3	1	12	4	6	0		
April.	29.872	— .041	30.145	13th	29.472	27th	1	7	4	2	4	6	3	3	0		
May.	29.910	— .047	30.327	24th	29.413	4th	0	4	5	4	3	7	6	2	0		
June.	30.100	+ .107	30.403	30th	29.861	6th	1	0	2	3	2	7	10	6	0		
July.	30.077	+ .055	30.357	1st	29.848	7th	1	8	3	1	0	5	4	9	0		
August.	30.072	+ .092	30.258	25th & 26th	29.754	30th	0	10	4	1	4	7	1	4	0		
September.	29.958	— .106	30.290	8th	29.384	14th	2	8	6	3	2	3	0	4	2		
October.	29.875	— .046	30.517	13th	29.275	29th	0	5	3	5	7	9	1	1	0		
November.	29.947	— .002	30.479	29th	29.266	13th	2	0	2	1	0	11	11	3	0		
December.	30.146	+ .237	30.661	21st	29.434	28th	1	9	0	0	0	8	10	3	0		
Average for the year.	29.989	+ 0.019				Totals.	11	64	35	28	32	89	55	47	4		

TABLE II.

Average Temperature in Shade and Subsoil.										Frosts.	Sub Soil.	Accumulated heat.	
1913.	Mean Maximum.	Mean Minimum.	Average Mean.	Difference from average of 15 years 1898-1912.	Mean Range.	Greatest range from min. to max.	Date.	Highest.		No. of times 30° and under in mean registered.	Average Temperature at 4 ft. below Grass at 9 a.m.	Above	
								Temperature.	Temperature.			42°	Below 42°
January.	47.5	40.0	43.8	+ 2.6	7.5	18.1 on 22nd	50.6 on 23rd	29.2 on 13th	29.2 on 13th	1	48.2	96.9	58.8
February.	46.0	38.4	42.2	+ 1.4	7.6	16.0 ,, 11th	52.8 ,, 27th	29.0 ,, 19th	29.0 ,, 19th	1	46.8	67.7	71.6
March.	49.5	41.0	45.2	+ 2.5	8.5	17.5 ,, 18th	52.2 ,, 26th	30.4 ,, 18th	30.4 ,, 18th	0	46.5	141.6	30.7
April.	52.9	42.8	47.9	+ 1.1	10.1	17.5 ,, 23rd	65.5 ,, 23rd	30.0 ,, 13th	1	47.3	202.0	14.7	
May.	59.8	47.6	53.7	+ 1.3	12.2	22.7 ,, 17th	69.7 ,, 26th	37.2 ,, 7th	0	50.2	371.8	1.4	
June.	63.8	51.1	57.5	+ 0.2	12.7	27.0 ,, 28th	79.1 ,, 29th	42.7 ,, 9th	0	54.9	464.1	0	
July.	65.1	52.9	59.2	- 2.4	12.5	20.9 ,, 31st	74.9 ,, 31st	47.8 ,, 8th	0	56.8	529.6	0	
August.	67.1	53.8	60.5	- 1.0	13.3	20.7 ,, 21st	76.0 ,, 27th	47.3 ,, 25th	0	57.8	571.4	0	
September.	64.2	53.8	59.0	+ 1.3	10.4	18.8 ,, 21st	69.4 ,, 30th	45.3 ,, 17th	0	58.1	512.7	0	
October.	59.5	50.9	55.2	+ 2.6	8.6	14.9 ,, 24th	63.6 ,, 3rd	39.0 ,, 24th	0	57.1	417.8	0.5	
November.	51.9	43.4	49.1	+ 3.2	11.5	20.1 ,, 27th	58.7 ,, 11th	34.8 ,, 23rd	0	54.5	249.4	6.9	
December.	47.3	38.3	42.8	- 0.4	9.0	21.7 ,, 26th	55.8 ,, 1st	28.7 ,, 29th	4	51.5	115.6	72.8	
Average for the year.	56.5	46.2	51.4	+ 1.1	10.3					Total 7	52.5	Total 3740.6	Total 257.4

TABLE III.

1913.	Humidity.					Rainfall.				
	<i>Average Temperature at 9 a.m. of</i>		<i>Vapour pressure.</i>	<i>Weight of aqueous vapour in a cubic foot of air.</i>	<i>Relative Humidity. Saturation=100.</i>	<i>Monthly Totals.</i>	<i>Difference from Average of 15 years 1898-1912.</i>	<i>Greatest Fall in 24 hours.</i>	<i>Number of rain days of not less than .006 inch.</i>	<i>Number of days of .04 inch or more.</i>
	<i>Dry Bulb.</i>	<i>Wet Bulb.</i>								
	°	°	Inch.	Grains.	%	Ins.	Ins.	Ins.	Date	
January	43·5	42·6	0·262	3·07	93	3·840	+ 1·62	0·67	on 11th	20 17
February	41·9	40·0	·226	2·66	85	1·190	— 0·14	0·41	„ 1st	10 7
March	45·4	43·6	·262	3·06	86	3·180	+ 1·38	0·47	„ 16th	22 19
April	48·3	45·8	·277	3·27	82	2·040	+ 0·50	0·40	„ 11th	17 15
May	55·0	52·6	·365	4·21	84	1·800	+ 0·12	0·52	„ 29th	8 7
June	59·2	55·7	·396	4·48	79	0·730	— 1·17	0·23	„ 5th	10 5
July	59·9	57·1	·427	4·86	83	1·095	— 0·25	0·28	„ 14th	11 8
August	62·7	59·1	·449	5·06	79	3·260	+ 1·06	1·34	„ 31st	10 7
September	59·7	57·4	·437	4·94	85	2·930	+ 1·30	1·00	„ 4th	11 8
October	56·2	54·0	·386	4·41	85	5·510	+ 2·07	1·25	„ 6th	21 14
November	49·9	48·6	·325	3·75	90	3·690	+ 0·69	0·95	„ 12th	17 15
December	42·6	41·5	·249	2·94	91	1·885	— 0·93	0·88	„ 23rd	16 9
Year's Average Totals.	52·0	49·8	0·338	3·85	85	31·150	+ 5·55			173 131

TABLE IV.

1913.	Bright Sunshine.						Per centage of possible amount.	
	Totals.	Hours.	Difference from Average of 15 years 1898-1912. Hours.	Per centage of possible amount.	Number of Sun-recorded Days.	Brightest Days.		
						Date.		Hours.
January.	57·7	— 13·3	22	19	26th	6·6	74	
February.	99·4	+ 5·3	34	21	20th	9·2	88	
March.	120·1	— 22·2	33	26	15th	9·3	79	
April.	139·6	— 54·1	34	28	20th	11·0	79	
May.	242·0	+ 13·3	51	29	17th	13·7	87	
June.	211·1	— 13·2	43	30	29th	14·7	90	
July.	147·3	— 104·2	30	28	25th	13·8	89	
August.	185·4	— 45·8	41	29	1st	13·5	88	
September.	160·3	— 28·6	43	27	24th	10·5	83	
October.	113·2	— 8·3	34	29	12th	9·1	84	
November.	82·7	+ 0·8	31	27	3rd	8·0	84	
December.	61·8	+ 6·9	25	21	20th	7·0	89	
Totals.	1620·6	— 264	36·3	314				

